

## Corrosion inhibitors for steel oilfield equipment

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### Abstract

© 2017 Institute of Thermomechanics CAS, v.v.i. The rate of corrosion and protection of steel are determined as a test environment using the model which produces water with the addition of inhibitors or corrosion inhibitors ( $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ ,  $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ ,  $\text{NaCl}$ ,  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ). The proposed steel protection "Steel 20" was 77.8 % in comparison to the same conditions conducted for tests of commercially available corrosion inhibitors. The protective properties of the proposed corrosion inhibitor are not inferior with respect to the currently used inhibitors.

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### Keywords

"Steel 20", Concentrate, Corrosion inhibitor, Corrosion rate, Hydrogen sulfide, Petroleum recovery